

---

## Selected GelRed® & GelGreen® References, by Application

[Click on the blue link to see journal article](#)

### Contents:

Publications using GelRed® and GelGreen® in selected applications are shown below.

#### GelRed® References by Application

- [Agarose gels](#) p. 1
- [Cloning & sequencing](#) p. 2
- [Denaturing gradient gel electrophoresis \(DGGE\)](#) p. 3
- [Gel extraction](#) p. 3
- [Mobility shift gels \(EMSA\)](#) p. 3
- [Polyacrylamide gel electrophoresis \(PAGE\)](#) p. 4
- [PCR products](#) p. 4
- [Pulsed field gel electrophoresis \(PFGE\)](#) p. 5
- [RNA gels](#) p. 5
- [Cell viability](#) p. 6
- [Other applications](#) p. 6

#### GelGreen® References by Application

- [Agarose gels](#) p. 7
- [Cloning & sequencing](#) p. 8
- [Denaturing gradient gel electrophoresis \(DGGE\)](#) p. 8
- [Polyacrylamide gel electrophoresis \(PAGE\)](#) p. 8
- [Other applications](#) p. 9

#### GelRed® References by Application

##### Agarose Gels

Boulet, G. A., et al. [Nucleic acid sequence-based amplification assay for human papillomavirus mRNA detection and typing: evidence for DNA amplification](#). J Clin Microbiol 48(7), 2524-2529, (2010), DOI: JCM.00173-10 [pii] 10.1128/JCM.00173-10

Brow, C. N., et al. [Effects of cryogenic preservation and storage on the molecular characteristics of microorganisms in sediments](#). Environ Sci Technol 44(21), 8243-8247, (2010), DOI: 10.1021/es101641y

Casu, R. E., et al. [High-throughput assessment of transgene copy number in sugarcane using real-time quantitative PCR](#). Plant Cell Rep 31(1), 167-177, (2012), DOI: 10.1007/s00299-011-1150-7

Civit, L., et al. [Evaluation of techniques for generation of single-stranded DNA for quantitative detection](#). Anal Biochem 431(2), 132-138, (2012), DOI: S0003-2697(12)00450-2 [pii] 10.1016/j.ab.2012.09.003

Ding, X. L., et al. [Mutation-sensitive molecular switch method to detect CES1A2 mutation in the Chinese Han and Yao populations](#). Genet Test Mol Biomarkers 15(9), 659-662, (2011), DOI: 10.1089/gtmb.2011.0010

Ducatez, M. F., et al. [Genotyping assay for the identification of 2009-2010 pandemic and seasonal H1N1 influenza virus reassortants](#). J Virol Methods 168(1-2), 78-81, (2010), DOI: S0166-0934(10)00156-4 [pii] 10.1016/j.jviromet.2010.04.020

Gabor, M. [Genotyping Single Nucleotide Polymorphism C4685T in 14.Intron of Bovine CAPN1 Gene by Rapid Tetra-Primer ARMS-PCR Method](#). Animal Science and Biotechnologies 44(1), 209-212, (2011).

Gonzalez-Gonzalez, E., et al. [Portable and accurate diagnostics for COVID-19: Combined use of the miniPCR thermocycler and a well-plate reader for SARS-CoV-2 virus detection](#). PLoS One 15(8), e0237418, (2020), DOI: 10.1371/journal.pone.0237418

Haines, A. M., et al. [Properties of nucleic acid staining dyes used in gel electrophoresis](#). Electrophoresis 36(6), 941-944, (2015), DOI: 10.1002/elps.201400496

Kwong, F. N., et al. [Chordin knockdown enhances the osteogenic differentiation of human mesenchymal stem cells](#). Arthritis Res Ther 10(3), R65, (2008), DOI: ar2436 [pii] 10.1186/ar2436

Lebbad, M., et al. [Dominance of Giardia assemblage B in Leon, Nicaragua](#). Acta Trop 106(1), 44-53, (2008), DOI: S0001-706X(08)00024-7 [pii] 10.1016/j.actatropica.2008.01.004

Machado, V. [Molecular Characterization of Host Strains of Spodoptera frugiperda \(Lepidoptera: Noctuidae\) in Southern Brazil](#). ANNALS OF THE ENTOMOLOGICAL SOCIETY OF AMERICA 101(3), 619-626, (2008), 10.1603/0013-8746

Podder, M., et al. [Robust SNP genotyping by multiplex PCR and arrayed primer extension](#). BMC Med Genomics 1, 5, (2008), DOI: 1755-8794-1-5 [pii] 10.1186/1755-8794-1-5

Ragone, S., et al. [Structural basis for inhibition of homologous recombination by the RecX protein](#). EMBO J 27(16), 2259-2269, (2008), DOI: emboj2008145 [pii] 10.1038/emboj.2008.145 (Strand exchange assay, ssDNA)

Rode, C., et al. [Antibacterial Zinc Oxide Nanoparticle Coating of Polyester Fabrics](#). Journal of Textile Science and Technology 1, 65-74, (2015), DOI: http://dx.doi.org/10.4236/jtst.2015.12007

Rogers, G. B., et al. [Assessing the diagnostic importance of nonviable bacterial cells in respiratory infections](#). Diagn Microbiol Infect Dis 62(2), 133-141, (2008), DOI: S0732-8893(08)00299-X [pii] 10.1016/j.diagmicrobio.2008.06.011

Wolfson, J. J., et al. [Subtilase cytotoxin activates PERK, IRE1 and ATF6 endoplasmic reticulum stress-signalling pathways](#). Cell Microbiol 10(9), 1775-1786, (2008), DOI: CMI1164 [pii] 10.1111/j.1462-5822.2008.01164.x (Agarose gel analysis DNA fragmentation in apoptotic cells)

## **Cloning & Sequencing**

Boulet, G. A., et al. [Nucleic acid sequence-based amplification assay for human papillomavirus mRNA detection and typing: evidence for DNA amplification](#). J Clin Microbiol 48(7), 2524-2529, (2010), DOI: JCM.00173-10 [pii] 10.1128/JCM.00173-10

Kataoka, R. [Comparison of the bacterial communities established on the mycorrhizae formed on Pinus thunbergii root tips by eight species of fungi](#). Plant Soil 304, 267-275, (2008), DOI: 10.1007/s11104-008-9548-x

Lebbad, M., et al. [Dominance of Giardia assemblage B in Leon, Nicaragua](#). Acta Trop 106(1), 44-53, (2008), DOI: S0001-706X(08)00024-7 [pii] 10.1016/j.actatropica.2008.01.004

Machado, V. [Molecular Characterization of Host Strains of Spodoptera frugiperda \(Lepidoptera: Noctuidae\) in Southern Brazil](#). ANNALS OF THE ENTOMOLOGICAL SOCIETY OF AMERICA 101(3), 619-626, (2008), 10.1603/0013-8746

Xu, Y. [Bacterial communities in soybean rhizosphere in response to soil type, soybean genotype, and their growth stage](#). Soil Biology & Biochemistry 41(5), 919-925, (2008), DOI: 10.1016/j.soilbio.2008.10.027

### **Denaturing Gradient Gel Electrophoresis (DGGE)**

Kataoka, R. [Comparison of the bacterial communities established on the mycorrhizae formed on Pinus thunbergii root tips by eight species of fungi](#). Plant Soil 304, 267-275, (2008), DOI: 10.1007/s11104-008-9548-x.

Xu, Y. [Bacterial communities in soybean rhizosphere in response to soil type, soybean genotype, and their growth stage](#). Soil Biology & Biochemistry 41(5), 919-925, (2008), DOI: 10.1016/j.soilbio.2008.10.027

### **Gel Extraction**

Boulet, G. A., et al. [Nucleic acid sequence-based amplification assay for human papillomavirus mRNA detection and typing: evidence for DNA amplification](#). J Clin Microbiol 48(7), 2524-2529, (2010), DOI: JCM.00173-10 [pii] 10.1128/JCM.00173-10

Francia, S., et al. [Site-specific DICER and DROSHA RNA products control the DNA-damage response](#). Nature 488(7410), 231-235, (2012), DOI: nature11179 [pii] 10.1038/nature11179

Han, D., et al. [Engineering a cell-surface aptamer circuit for targeted and amplified photodynamic cancer therapy](#). ACS Nano 7(3), 2312-2319, (2013), DOI: 10.1021/nn305484p

Kataoka, R. [Comparison of the bacterial communities established on the mycorrhizae formed on Pinus thunbergii root tips by eight species of fungi](#). Plant Soil 304, 267-275, (2008), DOI: 10.1007/s11104-008-9548-x.

Machado, V. [Molecular Characterization of Host Strains of Spodoptera frugiperda \(Lepidoptera: Noctuidae\) in Southern Brazil](#). ANNALS OF THE ENTOMOLOGICAL SOCIETY OF AMERICA 101(3), 619-626, (2008), 10.1603/0013-8746

Xu, Y. [Bacterial communities in soybean rhizosphere in response to soil type, soybean genotype, and their growth stage](#). Soil Biology & Biochemistry 41(5), 919-925, (2008), DOI: 10.1016/j.soilbio.2008.10.027

### **Mobility Shift Gels (EMSA)**

Liu, Y., et al. [The crystal structure of the human nascent polypeptide-associated complex domain reveals a nucleic acid-binding region on the NACA subunit](#). Biochemistry 49(13), 2890-2896, (2010), DOI: 10.1021/bi902050p

Lu, J., et al. [Structural and functional analysis of Utp23, a yeast ribosome synthesis factor with degenerate PIN domain](#). RNA 19(12), 1815-1824, (2013), DOI: rna.040808.113 [pii] 10.1261/rna.040808.113

Pilalis, E., et al. [Escherichia coli genome-wide promoter analysis: identification of additional AtoC binding target elements](#). BMC Genomics 12(1), 238, (2011), DOI: 1471-2164-12-238 [pii] 10.1186/1471-2164-12-238

Tateishi, Y., et al. [Molecular basis for SUMOylation-dependent regulation of DNA binding activity of heat shock factor 2](#). J Biol Chem 284(4), 2435-2447, (2009), DOI: M806392200 [pii] 10.1074/jbc.M806392200

### **Polyacrylamide Gel Electrophoresis (PAGE)**

Feng, J. and Jan, C. C. [Introgression and molecular tagging of Rf \(4\), a new male fertility restoration gene from wild sunflower Helianthus maximiliani L.](#) Theor Appl Genet 117(2), 241-249, (2008), DOI: 10.1007/s00122-008-0769-4

Grindel, A., et al. [Oxidative Stress, DNA Damage and DNA Repair in Female Patients with Diabetes Mellitus Type 2](#). PLoS One 11(9), e0162082, (2016), DOI: 10.1371/journal.pone.0162082 (PAGE GelRed® Nucleic Acid Gel Stain)

Katarína Ražná, J. Ž., Zdenka Gálová. [MicroRNA-Based Markers in Plant Genome Response to Abiotic Stress and Their Application in Plant Genotyping](#). IntechOpen Non-coding RNAs, (2019), DOI: 10.5772/intechopen.88064 (PAGE GelRed® Nucleic Acid Gel Stain)

Luevano-Martinez, L. A., et al. [Cardiolipin is a key determinant for mtDNA stability and segregation during mitochondrial stress](#). Biochim Biophys Acta 1847(6-7), 587-598, (2015), DOI: 10.1016/j.bbabi.2015.03.007 (PAGE GelRed® Nucleic Acid Gel Stain)

Nikitopoulou, I., et al. [Vascular endothelial-cadherin downregulation as a feature of endothelial transdifferentiation in monocrotaline-induced pulmonary hypertension](#). Am J Physiol Lung Cell Mol Physiol 311(2), L352-363, (2016), DOI: 10.1152/ajplung.00156.2014 (PAGE GelRed® Nucleic Acid Gel Stain)

Purhonen, J., et al. [A sensitive assay for dNTPs based on long synthetic oligonucleotides, EvaGreen dye and inhibitor-resistant high-fidelity DNA polymerase](#). Nucleic Acids Res 48(15), e87, (2020), DOI: 10.1093/nar/gkaa516 (PAGE GelRed® Nucleic Acid Gel Stain)

### **PCR Products**

Lebbad, M., et al. [Dominance of Giardia assemblage B in Leon, Nicaragua](#). Acta Trop 106(1), 44-53, (2008), DOI: S0001-706X(08)00024-7 [pii] 10.1016/j.actatropica.2008.01.004

Machado, V. [Molecular Characterization of Host Strains of Spodoptera frugiperda \(Lepidoptera: Noctuidae\) in Southern Brazil](#). ANNALS OF THE ENTOMOLOGICAL SOCIETY OF AMERICA 101(3), 619-626, (2008), 10.1603/0013-8746

Meza-Robles, C., et al. [One-step nested RT-PCR for COVID-19 detection: A flexible, locally developed test for SARS-CoV2 nucleic acid detection](#). J Infect Dev Ctries 14(7), 679-684, (2020), DOI: 10.3855/jidc.12726

Podder, M., et al. [Robust SNP genotyping by multiplex PCR and arrayed primer extension](#). BMC Med Genomics 1, 5, (2008), DOI: 1755-8794-1-5 [pii] 10.1186/1755-8794-1-5

Rogers, G. B., et al. [Assessing the diagnostic importance of nonviable bacterial cells in respiratory infections](#). *Diagn Microbiol Infect Dis* 62(2), 133-141, (2008), DOI: S0732-8893(08)00299-X [pii] 10.1016/j.diagmicrobio.2008.06.011

Silva Junior, J. V. J., et al. [End-point RT-PCR: A potential alternative for diagnosing coronavirus disease 2019 \(COVID-19\)](#). *J Virol Methods* 288, 114007, (2021), DOI: 10.1016/j.jviromet.2020.114007

Xu, Y. [Bacterial communities in soybean rhizosphere in response to soil type, soybean genotype, and their growth stage](#). *Soil Biology & Biochemistry* 41(5), 919-925, (2008), DOI: 10.1016/j.soilbio.2008.10.027

### **Pulsed Field Gel Electrophoresis (PFGE)**

Ikeda-Dantsuji, Y., et al. [Linezolid-resistant Staphylococcus aureus isolated from 2006 through 2008 at six hospitals in Japan](#). *J Infect Chemother* 17(1), 45-51, (2011), DOI: 10.1007/s10156-010-0085-1

Jin, F. J., et al. [A trial of minimization of chromosome 7 in Aspergillus oryzae by multiple chromosomal deletions](#). *Mol Genet Genomics* 283(1), 1-12, (2010), DOI: 10.1007/s00438-009-0494-y

Shueh, C. S., et al. [Simple, time saving pulsed-field gel electrophoresis protocol for the typing of Stenotrophomonas maltophilia](#). *J Microbiol Methods* 94(2), 141-143, (2013), DOI: S0167-7012(13)00176-0 [pii] 10.1016/j.mimet.2013.06.001

### **RNA Gels**

Alon, S., et al. [Barcoding bias in high-throughput multiplex sequencing of miRNA](#). *Genome Res* 21(9), 1506-1511, (2011), DOI: gr.121715.111 [pii] 10.1101/gr.121715.111

Aronica, L., et al. [Study of an RNA helicase implicates small RNA-noncoding RNA interactions in programmed DNA elimination in Tetrahymena](#). *Genes Dev* 22(16), 2228-2241, (2008), DOI: 22/16/2228 [pii] 10.1101/gad.481908

Chang, M. M., et al. [RT-qPCR demonstrates light-dependent AtRBCS1A and AtRBCS3B mRNA expressions in Arabidopsis thaliana leaves](#). *Biochem Mol Biol Educ* 44(4), 405-411, (2016), DOI: 10.1002/bmb.20959

Conde, J., et al. [RNA quantification using gold nanoprobe - application to cancer diagnostics](#). *J Nanobiotechnology* 8, 5, (2010), DOI: 1477-3155-8-5 [pii] 10.1186/1477-3155-8-5

Derks, N. M., et al. [Housekeeping genes revisited: different expressions depending on gender, brain area and stressor](#). *Neuroscience* 156(2), 305-309, (2008), DOI: S0306-4522(08)01117-2 [pii] 10.1016/j.neuroscience.2008.07.047 (RNA agarose gel electrophoresis)

Francia, S., et al. [Site-specific DICER and DROSHA RNA products control the DNA-damage response](#). *Nature* 488(7410), 231-235, (2012), DOI: nature11179 [pii] 10.1038/nature11179

Hisaoaka, M., et al. [Regulation of nucleolar chromatin by B23/nucleophosmin jointly depends upon its RNA binding activity and transcription factor UBF](#). *Mol Cell Biol* 30(20), 4952-4964, (2010), DOI: MCB.00299-10 [pii] 10.1128/MCB.00299-10

Kurth, H. M. and Mochizuki, K. [2'-O-methylation stabilizes Piwi-associated small RNAs and ensures DNA elimination in Tetrahymena](#). *RNA* 15(4), 675-685, (2009), DOI: ma.1455509 [pii] 10.1261/rna.1455509

Muller, M., et al. [A cytoplasmic complex mediates specific mRNA recognition and localization in yeast](#). PLoS Biol 9(4), e1000611, (2011), DOI: 10.1371/journal.pbio.1000611

Nobile, P. M., et al. [Transcriptional profile of genes involved in the biosynthesis of phytate and ferritin in Coffea](#). J Agric Food Chem 58(6), 3479-3487, (2010), DOI: 10.1021/jf9043088

Noto, T., et al. [The Tetrahymena argonaute-binding protein Giw1p directs a mature argonaute-siRNA complex to the nucleus](#). Cell 140(5), 692-703, (2010), DOI: S0092-8674(10)00125-X [pii] 10.1016/j.cell.2010.02.010

## Cell Viability

Bargmann, M., et al. [PLA-Based Biodegradable and Cytocompatible Implant Materials: Material Development, Processing and Properties](#). Journal of Materials Science and Engineering B 3(10), 619-632, (2013), DOI: 10.17265/2161-6221/2013.10.001

Bergwerf, I., et al. [Reporter gene-expressing bone marrow-derived stromal cells are immune-tolerated following implantation in the central nervous system of syngeneic immunocompetent mice](#). BMC Biotechnol 9, 1, (2009), DOI: 1472-6750-9-1 [pii] 10.1186/1472-6750-9-1

Li, L., et al. [Single-Cell-Arrayed Agarose Chip for in Situ Analysis of Cytotoxicity and Genotoxicity of DNA Cross-Linking Agents](#). Anal Chem 88(13), 6734-6742, (2016), DOI: 10.1021/acs.analchem.6b01008

Reichelt, S., et al. [Studies on the formation and characterization of macroporous electron-beam generated hyaluronan cryogels](#). Radiation Physics and Chemistry, (2014), DOI: <http://dx.doi.org/10.1016/j.radphyschem.2014.05.021>

Rode, C., et al. [Antibacterial Zinc Oxide Nanoparticle Coating of Polyester Fabrics](#). Journal of Textile Science and Technology 1, 65-74, (2015), DOI: <http://dx.doi.org/10.4236/jtst.2015.12007>

Szarc Vel Szic, K., et al. [Pharmacological Levels of Withaferin A \(Withania somnifera\) Trigger Clinically Relevant Anticancer Effects Specific to Triple Negative Breast Cancer Cells](#). PLoS One 9(2), e87850, (2014), DOI: 10.1371/journal.pone.0087850 PONE-D-13-29950

## Other Applications

Almasi, M. A., et al. [Comparison and evaluation of two diagnostic methods for detection of npt II and GUS genes in Nicotiana tabacum](#). Appl Biochem Biotechnol 175(8), 3599-3616, (2015), DOI: 10.1007/s12010-015-1529-y (direct LAMP assay)

Besic Gyenge, E. [Effects of hypericin and a chlorin based photosensitizer alone or in combination in squamous cell carcinoma cells in the dark](#). Photodiagnosis and Photodynamic Therapy <http://dx.doi.org/10.1016/j.pdpdt.2012.03.006>, (2012), (Comet assay)

Chen, Z. F., et al. [Synthesis, crystal structure, cytotoxicity and DNA interaction of 5,7-dichloro-8-quinolinolato-lanthanides](#). Eur J Med Chem 59, 194-202, (2013), DOI: S0223-5234(12)00641-1 [pii] 10.1016/j.ejmech.2012.10.037 (competitive binding and fluorescence polarization)

Chiaraviglio, L. and Kirby, J. E. [Evaluation of impermeant, DNA-binding dye fluorescence as a real-time readout of eukaryotic cell toxicity in a high throughput screening format](#). Assay Drug Dev Technol 12(4), 219-228, (2014), DOI: 10.1089/adt.2014.577 (high-throughput screening)

Garcia, J. F. M., et al. [Characterization of Actinobacillus seminis biofilm formation](#). Antonie Van Leeuwenhoek 113(9), 1371-1383, (2020), DOI: 10.1007/s10482-020-01447-w (DNA detection in biofilms)

Haines, A. M., et al. [Finding DNA: Using fluorescent in situ detection](#). Forensic Science International: Genetics Supplement Series 5, e501-e502, (2015), DOI: 10.1016/j.fsigss.2015.09.198

Haines, A. M., et al. [Effect of nucleic acid binding dyes on DNA extraction, amplification, and STR typing](#). Electrophoresis 36(20), 2561-2568, (2015), DOI: 10.1002/elps.201500170 (effects of dyes on DNA extraction)

Jeong, J., et al. [Enzymatic Polymerization on DNA Modified Gold Nanowire for Label-Free Detection of Pathogen DNA](#). Int J Mol Sci 16(6), 13653-13660, (2015), DOI: 10.3390/ijms160613653 (DNA hydrogel)

Khoshnevis, S., et al. [Crystal structure of the RNA recognition motif of yeast translation initiation factor eIF3b reveals differences to human eIF3b](#). PLoS One 5(9), (2010), DOI: 10.1371/journal.pone.0012784 (RNA binding assay)

Kozak, J., et al. [Rapid repair of DNA double strand breaks in Arabidopsis thaliana is dependent on proteins involved in chromosome structure maintenance](#). DNA Repair (Amst) 8(3), 413-419, (2008), DOI: S1568-7864(08)00397-2 [pii] 10.1016/j.dnarep.2008.11.012 (Comet assay)

Miyako, E., et al. [Self-assembled carbon nanotube honeycomb networks using a butterfly wing template as a multifunctional nanobiohybrid](#). ACS Nano 7(10), 8736-8742, (2013), DOI: 10.1021/nn403083v (DNA absorption test)

Newcomb, W. W. and Brown, J. C. [Time-dependent transformation of the herpesvirus tegument](#). J Virol 83(16), 8082-8089, (2009), DOI: JVI.00777-09 [pii] 10.1128/JVI.00777-09 (Virus staining on PDVF membrane)

Ragone, S., et al. [Structural basis for inhibition of homologous recombination by the RecX protein](#). EMBO J 27(16), 2259-2269, (2008), DOI: emboj2008145 [pii] 10.1038/emboj.2008.145 (Strand exchange assay, ssDNA)

Rocha, M. S. [Extracting physical chemistry from mechanics: a new approach to investigate DNA interactions with drugs and proteins in single molecule experiments](#). Integr Biol (Camb) 7(9), 967-986, (2015), DOI: 10.1039/c5ib00127g (contour length of DNA-ligand complexes)

Wolfson, J. J., et al. [Subtilase cytotoxin activates PERK, IRE1 and ATF6 endoplasmic reticulum stress-signalling pathways](#). Cell Microbiol 10(9), 1775-1786, (2008), DOI: CMI1164 [pii] 10.1111/j.1462-5822.2008.01164.x (DNA fragmentation analysis in agarose gels)

Wozniakowski, G., et al. [Loop-mediated isothermal amplification for the detection of goose circovirus](#). Virol J 9, 110, (2012), DOI: 1743-422X-9-110 [pii] 10.1186/1743-422X-9-110 (LAMP detection of goose circovirus)

## **GelGreen® References by Application**

### **Agarose Gels**

Bradbury, I. R., et al. [Evidence for divergence and adaptive isolation in post-glacially derived bimodal allopatric and sympatric rainbow smelt populations](#). Biological Journal of the Linnean Society 101(3), 583-594, (2010), DOI: 10.1111/j.1095-8312.2010.01533.x



Gonzalez-Gonzalez, E., et al. [Portable and accurate diagnostics for COVID-19: Combined use of the miniPCR thermocycler and a well-plate reader for SARS-CoV-2 virus detection](#). PLoS One 15(8), e0237418, (2020), DOI: 10.1371/journal.pone.0237418

Gonzalez-Gonzalez, E., et al. [Portable and accurate diagnostics for COVID-19: Combined use of the miniPCR thermocycler and a well-plate reader for SARS-CoV-2 virus detection](#). PLoS One 15(8), e0237418, (2020), DOI: 10.1371/journal.pone.0237418

Haines, A. M., et al. [Finding DNA: Using fluorescent in situ detection](#). Forensic Science International: Genetics Supplement Series 5, e501-e502, (2015), DOI: 10.1016/j.fsigss.2015.09.198

Haines, A. M., et al. [Effect of nucleic acid binding dyes on DNA extraction, amplification, and STR typing](#). Electrophoresis 36(20), 2561-2568, (2015), DOI: 10.1002/elps.201500170

Haines, A. M., et al. [Properties of nucleic acid staining dyes used in gel electrophoresis](#). Electrophoresis 36(6), 941-944, (2015), DOI: 10.1002/elps.201400496

Madala, N. E., et al. [Deciphering the structural and biological properties of the lipid A moiety of lipopolysaccharides from Burkholderia cepacia strain ASP B 2D, in Arabidopsis thaliana](#). Glycobiology 21(2), 184-194, (2011), DOI: cwq146 [pii] 10.1093/glycob/cwq146

Toppings, N. B., et al. [A rapid near-patient detection system for SARS-CoV-2 using saliva](#). Sci Rep 11(1), 13378, (2021), DOI: 10.1038/s41598-021-92677-z

### **Cloning & Sequencing**

Bradbury, I. R., et al. [Evidence for divergence and adaptive isolation in post-glacially derived bimodal allopatric and sympatric rainbow smelt populations](#). Biological Journal of the Linnean Society 101(3), 583-594, (2010), DOI: 10.1111/j.1095-8312.2010.01533.x

Madala, N. E., et al. [Deciphering the structural and biological properties of the lipid A moiety of lipopolysaccharides from Burkholderia cepacia strain ASP B 2D, in Arabidopsis thaliana](#). Glycobiology 21(2), 184-194, (2011), DOI: cwq146 [pii] 10.1093/glycob/cwq146

### **Denaturing Gradient Gel Electrophoresis (DGGE)**

Amorim, C. L., et al. [Bioaugmentation for treating transient 4-fluorocinnamic acid shock loads in a rotating biological contactor](#). Bioresour Technol 144, 554-562, (2013), DOI: S0960-8524(13)01068-7 [pii] 10.1016/j.biortech.2013.07.010

Amorim, C. L., et al. [Performance of aerobic granular sludge in a sequencing batch bioreactor exposed to ofloxacin, norfloxacin and ciprofloxacin](#). Water Res 50, 101-113, (2014), DOI: S0043-1354(13)00849-X [pii] 10.1016/j.watres.2013.10.043

Portney, N. G., et al. [Length-based encoding of binary data in DNA](#). Langmuir 24(5), 1613-1616, (2008), DOI: 10.1021/la703235y

Sutton, N. B., et al. [Characterization of geochemical constituents and bacterial populations associated with As mobilization in deep and shallow tube wells in Bangladesh](#). Water Res 43(6), 1720-1730, (2009), DOI: S0043-1354(09)00029-3 [pii] 10.1016/j.watres.2009.01.006

### **Polyacrylamide Gel Electrophoresis (PAGE)**



Takeshima, H., et al. [Mouse Dnmt3a preferentially methylates linker DNA and is inhibited by histone H1](#). J Mol Biol 383(4), 810-821, (2008), DOI: S0022-2836(08)00279-9 [pii] 10.1016/j.jmb.2008.03.001 (GelGreen staining of oligonucleosomes by PAGE)

### Other Applications

Chiaraviglio, L. and Kirby, J. E. [Evaluation of impermeant, DNA-binding dye fluorescence as a real-time readout of eukaryotic cell toxicity in a high throughput screening format](#). Assay Drug Dev Technol 12(4), 219-228, (2014), DOI: 10.1089/adt.2014.577 (high-throughput screening)

Cortes, R., et al. [A novel cyclometallated Pt\(II\)-ferrocene complex induces nuclear FOXO3a localization and apoptosis and synergizes with cisplatin to inhibit lung cancer cell proliferation](#). Metallomics, (2014), DOI: 10.1039/c3mt00194f (Comet assay)

Hu, L. Y., et al. [Skeletal muscle progenitors are sensitive to collagen architectural features of fibril size and cross linking](#). Am J Physiol Cell Physiol 321(2), C330-C342, (2021), DOI: 10.1152/ajpcell.00065.2021 (nuclear staining)

Kemleu, S., et al. [A Field-Tailored Reverse Transcription Loop-Mediated Isothermal Assay for High Sensitivity Detection of Plasmodium falciparum Infections](#). PLoS One 11(11), e0165506, (2016), DOI: 10.1371/journal.pone.0165506 (RT-LAMP assay on whole blood lysates)

Lee, J. B., et al. [A mechanical metamaterial made from a DNA hydrogel](#). Nat Nanotechnol 7(12), 816-820, (2012), DOI: nnano.2012.211 [pii] 10.1038/nnano.2012.211 (DNA hydrogel)

Li, C., et al. [Responsive Double Network Hydrogels of Interpenetrating DNA and CB\[8\] Host-Guest Supramolecular Systems](#). Adv Mater 27(21), 3298-3304, (2015), DOI: 10.1002/adma.201501102 (DNA hydrogel)

Maougal, R. T., et al. [Localization of the Bacillus subtilis beta-propeller phytase transcripts in nodulated roots of Phaseolus vulgaris supplied with phytate](#). Planta, (2014), DOI: 10.1007/s00425-013-2023-9 (in situ DNA detection)

Suzuki, M. [Protamine-induced DNA compaction but not aggregation shows effective radioprotection against double-strand breaks](#). Chemical Physics Letters 480, 113-117, (2009), (imaging DNA molecules)

Toppings, N. B., et al. [A rapid near-patient detection system for SARS-CoV-2 using saliva](#). Sci Rep 11(1), 13378, (2021), DOI: 10.1038/s41598-021-92677-z (RT-LAMP)

Valdes, A., et al. [Capillary gel electrophoresis-laser induced fluorescence of double-stranded DNA fragments using GelGreen dye](#). Electrophoresis, (2013), DOI: 10.1002/elps.201200624 (capillary gel electrophoresis)

Zeng, H., et al. [Droplet Enhanced Fluorescence for Ultrasensitive Detection Using Inkjet](#). Anal Chem 88(12), 6135-6139, (2016), DOI: 10.1021/acs.analchem.6b01566 (gel stain for ssDNA)